

U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Admin.

National Ocean Service

Office of Ocean Resource Conservation and Assessment Hazardous Materials Response and Assessment Division c/o EPA Office of Site Remediation and Restoration (HIO) J.F. Kennedy Federal Building Boston, MA 02203

Boston, MA 02203 27 January 1997

Ms. Christine Williams
U.S. EPA Office of Site Remediation and Restoration
J.F. Kennedy Federal Building
Boston, MA 02203

Mr. Philip Otis U.S. Department of the Navy Northern Division - NAVFAC 10 Industrial Highway Code 1811/PO - Mail Stop 82 Lester, PA 19113-2090

Dear Ms Williams/Mr. Otis:

Thank-you for the Site 09 (Allen Harbor Landfill) Proposed Plan. NOAA believes that this remedy, as described, will reduce the ground water flow through the landfill debris and thereby eliminate some of the site COC discharge. More importantly to NOAA is the construction of marine wetlands along the shoreline that will both provide important habitat to marine natural resources and act as a sink for any low-level contamination remaining in the reduced ground water flow.

NOAA would like to address two issues.

1. The EPA/RIDEM emphasis on the RCRA C cap over a permanent separation between tidal waters and the landfill waste has always surprised us. Clearly the RCRA C cap will help eliminate some of the ground water flow, but the tidal exchange will not be affected. Despite some of the waste above the high tide line, much of the data appears to support the potential liberation of more contamination by the semi-diurnal tidal exchange then that resulting from the shallow ground water. Although a monitoring program will check on this transport of contamination, NOAA believes that potentially affected natural resources would be better served by a remedy that first addresses the landfill isolation/monitoring.

The presentation of information supporting the above were addressed at our recent discussions on 6 December 1996 at RIDEM headquarters. However most discussions up to now have centered on the type of landfill cap needed to reduce/eliminate rainfall infiltration. NOAA believes a soil cap likely would reduce infiltration and although an impermeable cap may provide increased protection to the intertidal zone, neither will completely eliminate the seeps. But this argument concerning the type of cap falls outside of NOAA's interest as long as landfill-related contaminants are reduced.

2. NOAA strongly endorses the construction of marine wetlands in front of the landfill toe. This will provide additional protection to Allen Harbor as the organic-rich wetland sediments likely will sorb any residual low-level seeps/ground water contaminants. In addition, the wetlands will serve as habitat for natural resources and effectively restore the intertidal environment to conditions before the landfill was constructed. It seems plausible that the expected amount of subsequent contaminant uptake in this wetland could be estimated based on the seepage rates, aqueous

contaminant load, the literature-based partitioning coefficients, and TOC in wetland sediments. NOAA wants to be informed in advance on discussions pertaining to the construction of such wetlands. We have individuals who can assist in such planning.

Sincerely,

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Kenneth Finkelstein, Ph.D.

cc: Tim Prior (USF&WS)